

CLAIMS:

We claim:

1. A user customizable report generator comprising a configuration for attachment to at least one database through at least one reporting tool, the generator comprising:
 - at least one set of pre-established screens for defining at least one value for a corresponding database parameter specified within a report template;
 - a communicative coupling to at least one business rule;
 - business rule enforcement logic disposed within each of said pre-established screens, said logic comprising programming for processing session state information to assist in enforcing said at least one business rule; and,
 - a report generation component coupled to said set of pre-established screens and programmed to generate a report definition based upon parameters in a report template and a selection of said pre-established screens for each of said parameters.
2. The report generator of claim 1, wherein each of said screens comprises markup language configured for rendering in a content browser and encapsulating script logic for execution in said content browser.
3. The report generator of claim 1, wherein each of said screens comprises a Java server page (JSP).

4. The report generator of claim 1, wherein said at least one business rule comprises an access control rule conditioned upon session state information accessible within each of said pre-established screens.
5. The report generator of claim 4, wherein said session state information comprises information selected from the group consisting of an identity of an end user, a time of day, a date, and a network address for said end user.
6. The report generator of claim 1, wherein said report definition comprises a specified ordering of said selection of said pre-established screens for each of said parameters.
7. The report generator of claim 1, wherein said report generation component further comprises logic for producing a report based upon said report definition.
8. A method for generating a user customized report comprising the steps of:
 - retrieving a specified template for producing a desired report;
 - determining from said specified template a set of parameters required to produce said desired report;
 - for each parameter in said set, selecting a screen for providing a user interface through which a value can be established for said parameter, and embedding business rule enforcement logic in said selected screen; and,

saving each of said selected screens in a report definition configured to produce a report while executing said embedded business rule enforcement logic.

9. The method of claim 8, further comprising the step of storing an order of presentation for said selected screens in said report definition.
10. The method of claim 9, further comprising the steps of:
 - retrieving said report definition;
 - rendering each of said selected screens in said stored order;
 - collecting parameter values for said parameters in said set through said rendered screens while limiting said parameter values according to said embedded business rule enforcement logic; and,
 - generating said report based upon said collected parameter values.
11. The method of claim 10, wherein said collecting step comprises the steps of:
 - identifying session state data through said rendered screens;
 - processing said session state data to limit data input through form fields in said screens; and,
 - accepting data input through said form fields to establish said parameters.
12. The method of claim 11, wherein said processing step comprises the steps of:
 - identifying an end user through said session state data;

limiting a range of data which can be accessed in said report based upon an identity of said end user as processed through said embedded business rule enforcement logic; and,

reflecting said limited range of data through data input restrictions applied to said form fields in said screens.

13. The method of claim 10, further comprising the step of saving said report for subsequent reuse.

14. The method of claim 13, further comprising the steps of:

loading said saved report;

determining session state data for an end user loading said saved report;

applying at least one business rule comparable to a business rule reflected in said embedded business rule enforcement logic to said session state data; and,

modifying said saved report to enforce said at least one comparable business rule.

15. A machine readable storage having stored thereon a computer program for generating a user customized report, the computer program comprising a routine set of instructions which when executed by the machine cause the machine to perform the steps of:

retrieving a specified template for producing a desired report;

determining from said specified template a set of parameters required to produce said desired report;

for each parameter in said set, selecting a screen for providing a user interface through which a value can be established for said parameter, and embedding business rule enforcement logic in said selected screen; and,

saving each of said selected screens in a report definition configured to produce a report while executing said embedded business rule enforcement logic.

16. The machine readable storage of claim 15, further comprising the step of storing an order of presentation for said selected screens in said report definition.

17. The machine readable storage of claim 16, further comprising the steps of:
retrieving said report definition;
rendering each of said selected screens in said stored order;
collecting parameter values for said parameters in said set through said rendered screens while limiting said parameter values according to said embedded business rule enforcement logic; and,
generating said report based upon said collected parameter values.

18. The machine readable storage of claim 17, wherein said collecting step comprises the steps of:

identifying session state data through said rendered screens;

processing said session state data to limit data input through form fields in said screens; and,

accepting data input through said form fields to establish said parameters.

19. The machine readable storage of claim 18, wherein said processing step comprises the steps of:

identifying an end user through said session state data;

limiting a range of data which can be accessed in said report based upon an identity of said end user as processed through said embedded business rule enforcement logic; and,

reflecting said limited range of data through data input restrictions applied to said form fields in said screens.

20. The machine readable storage of claim 17, further comprising the step of saving said report for subsequent reuse.

21. The machine readable storage of claim 20, further comprising the steps of:

loading said saved report;

determining session state data for an end user loading said saved report;

applying at least one business rule comparable to a business rule reflected in said embedded business rule enforcement logic to said session state data; and,

modifying said saved report to enforce said at least one comparable business rule.